



## SEQUENCE LISTING

Brockhaus, et al.

&lt;120&gt; Human TNF Receptor

&lt;130&gt; 01017/40451B

&lt;140&gt; US 08/444,790

&lt;141&gt; 1995-05-19

&lt;150&gt; CH 3319/89

&lt;151&gt; 1989-09-12

&lt;150&gt; CH 786/90

&lt;151&gt; 1990-03-08

&lt;150&gt; CH 1347/90

&lt;151&gt; 1990-04-20

&lt;150&gt; US 07/580,013

&lt;151&gt; 1990-09-10

&lt;150&gt; US 08/095,640

&lt;151&gt; 1993-07-21

&lt;160&gt; 26

&lt;170&gt; PatentIn version 3.3

&lt;210&gt; 1

&lt;211&gt; 2111

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

gaattcgggg gggttcaaga tcaactgggac caggccgtga tctctatgcc cgagtctcaa	60
ccctcaactg tcaccccaag gcacttggga cgtcctggac agaccgagtc ccgggaagcc	120
ccagcactgc cgctgccaca ctgccctgag cccaaatggg ggagtgagag gccatagctg	180
tctggcatgg gcctctccac cgtgcctgac ctgctgctgc cgctgggtgct cctggagctg	240
ttggtgggaa tatacccctc aggggttatt ggactggtcc ctcacctagg ggacagggag	300
aagagagata gtgtgtgtcc ccaaggaaaa tatatccacc ctcaaaataa ttcgatttgc	360
tgtaccaagt gccacaaagg aacctacttg tacaatgact gtccaggccc ggggcaggat	420
acggactgca gggagtgtga gagcggctcc ttcaccgctt cagaaaacca cctcagacac	480
tgctcagct gctccaaatg ccgaaaggaa atgggtcagg tggagatctc ttcttgcaca	540
gtggaccggg acaccgtgtg tggctgcagg aagaaccagt accggcatta ttggagtga	600
aaccttttcc agtgettcaa ttgcagcctc tgcttcaatg ggaccgtgca cctctcctgc	660
caggagaaac agaacaccgt gtgcacctgc catgcaggtt tctttctaag agaaaacgag	720
tgtgtctcct gtagtaactg taagaaaagc ctggagtgca cgaagtgtg cctacccag	780
attgagaatg ttaagggcac tgaggactca ggcaccacag tgctgttgcc cctgggtcatt	840

```

ttctttggtc tttgcctttt atccctcctc ttcattgggt taatgtatcg ctaccaacgg 900
tggaagtcca agctctactc cattgtttgt gggaaatcga cacctgaaaa agaggggggag 960
cttgaaggaa ctactactaa gcccctggcc ccaaacccaa gcttcagtcc cactccaggc 1020
ttcaccccca ccttggggtt cagtcccggtg ccaggttcca ccttcacctc cagctccacc 1080
tatacccccg gtgactgtcc caacttttgcg gctccccgca gagaggtggc accaccctat 1140
caggggggtg accccatcct tgcgacagcc ctcgcctccg accccatccc caacccctt 1200
cagaagtggg aggacagcgc ccacaagcca cagagcctag aactgatga cccgcgcagc 1260
ctgtacgccg tgggtggagaa cgtgcccccg ttgcgctgga aggaattcgt gcggcgcccta 1320
gggctgagcg accacgagat cgatcggtg gagctgcaga acgggcgctg cctgcgcgag 1380
gcgcaataca gcatgctggc gacctggagg cggcgcacgc cgcggcgcga ggccacgctg 1440
gagctgctgg gacgctgtct ccgcgacatg gacctgctgg gctgcctgga ggacatcgag 1500
gaggcgcttt gcggccccgc cgccctcccg ccgcgcacca gtcttctcag atgaggctgc 1560
gcccctgcgg gcagctctaa ggaccgtcct gcgagatcg cttccaacc cacttttttc 1620
tggaaggag gggctctgca ggggcaagca ggagctagca gccgcctact tgggtgctaac 1680
ccctcgatgt acatagcttt tctcagctgc ctgcgcgccg ccgacagtca gcgctgtgcg 1740
cgcgagaga ggtgcgccgt gggctcaaga gcctgagtgg gtggtttgcg aggatgaggg 1800
acgctatgcc tcatgccgt tttgggtgtc ctcaccagca aggctgctcg ggggccctg 1860
gttcgtccct gagccttttt cacagtgcac aagcagtttt ttttgtttt gttttgtttt 1920
gttttgtttt taaatcaatc atgttacact aatagaaact tggcactcct gtgccctctg 1980
cctggacaag cacatagcaa gctgaactgt cctaaggcag ggcgagcac ggaacaatgg 2040
ggccttcagc tggagctgtg gacttttgta catacactaa aattctgaag ttaaaaaaaaa 2100
aaccgaatt c 2111

```

```

<210> 2
<211> 455
<212> PRT
<213> Homo sapiens

```

```
<400> 2
```

```

Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu
1          5          10          15

```

```

Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro
20          25          30

```

```

His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys
35          40          45

```

Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys  
 50 55 60

Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp  
 65 70 75 80

Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu  
 85 90 95

Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val  
 100 105 110

Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg  
 115 120 125

Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe  
 130 135 140

Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu  
 145 150 155 160

Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu  
 165 170 175

Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr  
 180 185 190

Lys Leu Cys Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser  
 195 200 205

Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu  
 210 215 220

Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys  
 225 230 235 240

Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu  
 245 250 255

Gly Glu Leu Glu Gly Thr Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser  
 260 265 270

Phe Ser Pro Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val  
 275 280 285

Pro Ser Ser Thr Phe Thr Ser Ser Ser Thr Tyr Thr Pro Gly Asp Cys  
 290 295 300

Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly  
305 310 315 320

Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn  
325 330 335

Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp  
340 345 350

Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro  
355 360 365

Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu  
370 375 380

Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln  
385 390 395 400

Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala  
405 410 415

Thr Leu Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly  
420 425 430

Cys Leu Glu Asp Ile Glu Glu Ala Leu Cys Gly Pro Ala Ala Leu Pro  
435 440 445

Pro Ala Pro Ser Leu Leu Arg  
450 455

<210> 3  
<211> 2339  
<212> DNA  
<213> Homo sapiens

<400> 3  
tcggacaccg tgtgtgactc ctgtgaggac agcacatata cccagctctg gaactggggt 60  
cccgagtgtg tgagctgtgg ctcccgtgtg agctctgacc aggtggaaac tcaagcctgc 120  
actcgggaac agaaccgcat ctgcacctgc aggcccggtt ggtactgcgc gctgagcaag 180  
caggaggggt gccggctgtg cgcgccgtg ccgaagtgcc gcccggtt cggcgtggcc 240  
agaccaggaa ctgaaacatc agacgtggtg tgcaagcctt gtgccccggg gacgttctcc 300  
aacacgactt catccacgga tatttgcagg cccaccaga tctgtaacgt ggtggccatc 360  
cctgggaatg caagcaggga tgcagtctgc acgtccacgt cccccaccg gagtatggcc 420  
ccaggggcag tacacttacc ccagccagt tccacacgat cccaacacac gcagccaagt 480  
ccagaacca gcactgtctc aagcacctcc ttctgtctcc caatgggccc cagcccccca 540

gctgaagggga	gcaactggcga	cttcgctctt	ccagttggac	tgattgtggg	tgtgacagcc	600
ttgggtctac	taataatagg	agtgggtgaac	tgtgtcatca	tgaccaggt	gaaaaagaag	660
cccttgtgcc	tgcagagaga	agccaagggtg	cctcacttgc	ctgccgataa	ggcccggggt	720
acacagggcc	ccgagcagca	gcacctgctg	atcacagcgc	cgagctccag	cagcagctcc	780
ctggagagct	cggccagtgc	gttggacaga	agggcgccca	ctcggaacca	gccacaggca	840
ccaggcgtgg	aggccagtgg	ggccggggag	gcccgggcca	gcaccgggag	ctcagcagat	900
tcttcccctg	gtggccatgg	gacccaggtc	aatgtcacct	gcatcgtgaa	cgtctgtagc	960
agctctgacc	acagctcaca	gtgctcctcc	caagccagct	ccacaatggg	agacacagat	1020
tccagcccct	cggagtcccc	gaaggacgag	caggctcccct	tctccaagga	ggaatgtgcc	1080
tttcggtcac	agctggagac	gccagagacc	ctgctgggga	gcaccgaaga	gaagcccctg	1140
ccccttgagg	tgctgatgc	tgggatgaag	cccagttaac	caggccggtg	tgggctgtgt	1200
cgtagccaag	gtggctgagc	cctggcagga	tgaccctgcg	aaggggccct	ggtccttcca	1260
ggccccacc	actaggactc	tgaggctctt	tctgggccaa	gttcctctag	tgccctccac	1320
agccgcagcc	tccctctgac	ctgcaggcca	agagcagagg	cagcgagtgt	tggaaagcct	1380
ctgctgccat	ggcgtgtccc	tctcggaagg	ctggctgggc	atggacgttc	ggggcatgct	1440
ggggcaagtc	cctgagtctc	tgtgacctgc	cccgccagc	tgacctgcc	agcctggctt	1500
ctggagccct	tgggtttttt	gtttgtttgt	ttgtttgttt	gtttgtttct	ccccctgggc	1560
tctgcccagc	tctggcttcc	agaaaacccc	agcatccttt	tctgcagagg	ggctttctgg	1620
agaggagggga	tgctgcctga	gtcacccatg	aagacaggac	agtgcctcag	cctgaggctg	1680
agactgcggg	atggctcctg	ggctctgtgc	agggaggagg	tggcagccct	gtagggaacg	1740
gggtccttca	agttagctca	ggaggcttgg	aaagcatcac	ctcaggccag	gtgcagtggc	1800
tcacgcctat	gatcccagca	ctttgggagg	ctgaggcggg	tggatcacct	gaggttagga	1860
gttcgagacc	agcctggcca	acatggtaaa	accccatctc	tactaaaaat	acagaaatta	1920
gccgggcgtg	gtggcgggca	cctatagtcc	cagctactca	gaagcctgag	gctgggaaat	1980
cgtttgaacc	cgggaagcgg	aggttgcagg	gagccgagat	cacgccactg	cactccagcc	2040
tgggcgacag	agcgagagtc	tgtctcaaaa	gaaaaaaaaa	aagcaccgcc	tccaaatgct	2100
aacttgtcct	tttgtaccat	ggtgtgaaag	tcagatgccc	agagggccca	ggcaggccac	2160
catattcagt	gctgtggcct	gggcaagata	acgcacttct	aactagaaat	ctgccaattt	2220
tttaaaaaag	taagtaccac	tcaggccaac	aagccaacga	caaagccaaa	ctctgccagc	2280
cacatccaac	ccccacctg	ccatttgcac	cctccgcctt	cactccggtg	tgctgcag	2339

<210> 4  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 4

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu  
 1 5 10 15

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser  
 20 25 30

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys  
 35 40 45

Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys  
 50 55 60

Arg Leu Cys Ala Pro Leu Pro Lys Cys Arg Pro Gly Phe Gly Val Ala  
 65 70 75 80

Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala Pro  
 85 90 95

Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro His  
 100 105 110

Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Arg Asp Ala  
 115 120 125

Val Cys Thr Ser Thr Ser Pro Thr Arg Ser Met Ala Pro Gly Ala Val  
 130 135 140

His Leu Pro Gln Pro Val Ser Thr Arg Ser Gln His Thr Gln Pro Ser  
 145 150 155 160

Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser Phe Leu Leu Pro Met Gly  
 165 170 175

Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly Asp Phe Ala Leu Pro Val  
 180 185 190

Gly Leu Ile Val Gly Val Thr Ala Leu Gly Leu Leu Ile Ile Gly Val  
 195 200 205

Val Asn Cys Val Ile Met Thr Gln Val Lys Lys Lys Pro Leu Cys Leu  
 210 215 220

Gln Arg Glu Ala Lys Val Pro His Leu Pro Ala Asp Lys Ala Arg Gly  
 225 230 235 240

Thr Gln Gly Pro Glu Gln Gln His Leu Leu Ile Thr Ala Pro Ser Ser  
 245 250 255

Ser Ser Ser Ser Leu Glu Ser Ser Ala Ser Ala Leu Asp Arg Arg Ala  
 260 265 270

Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly Val Glu Ala Ser Gly Ala  
 275 280 285

Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser Ala Asp Ser Ser Pro Gly  
 290 295 300

Gly His Gly Thr Gln Val Asn Val Thr Cys Ile Val Asn Val Cys Ser  
 305 310 315 320

Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln Ala Ser Ser Thr Met  
 325 330 335

Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro Lys Asp Glu Gln Val  
 340 345 350

Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser Gln Leu Glu Thr Pro  
 355 360 365

Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro Leu Pro Leu Gly Val  
 370 375 380

Pro Asp Ala Gly Met Lys Pro Ser  
 385 390

<210> 5  
 <211> 28  
 <212> PRT  
 <213> Artificial sequence

<220>  
 <223> Synthetic peptide

<220>  
 <221> misc\_feature  
 <222> (25)..(25)  
 <223> Xaa = any or unknown amino acid

<400> 5

Leu Val Pro His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro  
 1 5 10 15

Gln Gly Lys Tyr Ile His Pro Glu Xaa Asn Ser Ile  
20 25

<210> 6  
<211> 15  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 6

Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu Gly Thr Thr Thr Lys  
1 5 10 15

<210> 7  
<211> 18  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 7

Ser Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys  
1 5 10 15

Pro Leu

<210> 8  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 8

Val Phe Cys Thr  
1

<210> 9  
<211> 16  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 9

Asn Gln Pro Gln Ala Pro Gly Val Glu Ala Ser Gly Ala Gly Glu Ala  
1 5 10 15



<210> 10  
<211> 18  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> Xaa = any or unknown amino acid

<400> 10

Leu Pro Ala Gln Val Ala Phe Xaa Pro Tyr Ala Pro Glu Pro Gly Ser  
1 5 10 15

Thr Cys

<210> 11  
<211> 13  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Xaa = any or unknown amino acid

<400> 11

Ile Xaa Pro Gly Phe Gly Val Ala Tyr Pro Ala Leu Glu  
1 5 10

<210> 12  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 12

Leu Cys Ala Pro  
1

<210> 13  
<211> 7  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 13

Val Pro His Leu Pro Ala Asp  
1 5

<210> 14

<211> 15

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<220>

<221> misc\_feature

<222> (9)..(10)

<223> Xaa = any or unknown amino acid

<220>

<221> misc\_feature

<222> (13)..(13)

<223> Xaa = any or unknown amino acid

<400> 14

Gly Ser Gln Gly Pro Glu Gln Gln Xaa Xaa Leu Ile Xaa Ala Pro  
1 5 10 15

<210> 15

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 15

Leu Val Pro His Leu Gly Asp Arg Glu  
1 5

<210> 16

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 16

agggagaaga gagatagtgt gtgtccc

27

<210> 17

<211> 41

<212> DNA

<213> Artificial sequence

<220>  
 <223> Synthetic primer  
  
 <400> 17  
 aagcttggcc aggatccagc tgactgactg atcgcgagat c 41  
  
 <210> 18  
 <211> 41  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Synthetic primer  
  
 <400> 18  
 ttcgaaccgg tcctaggtcg actgactgac tagcgctcta g 41  
  
 <210> 19  
 <211> 38  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Synthetic primer  
  
 <400> 19  
 cacagggatc catagctgtc tggcatgggc ctctccac 38  
  
 <210> 20  
 <211> 44  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Synthetic primer  
  
 <400> 20  
 cgtgactcct gagtccgtgg tgtattatct ctagaccatg gccc 44  
  
 <210> 21  
 <211> 19  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Synthetic primer  
  
 <400> 21  
 gatccagaat tcataatag 19  
  
 <210> 22  
 <211> 19  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Synthetic primer

<400> 22	
gtcttaagta ttatccatg	19
<210> 23	
<211> 31	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> Synthetic primer	
<400> 23	
gcaccacata atagagatct ggtaccggga a	31
<210> 24	
<211> 25	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> Synthetic primer	
<400> 24	
gtgtattatc tctagaccat ggccc	25
<210> 25	
<211> 29	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> Synthetic primer	
<400> 25	
tacgagctcg gccatagctg tctggcatg	29
<210> 26	
<211> 29	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> Synthetic primer	
<400> 26	
atagagctct gtggtgctg agtcctcag	29